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MBZ-0345**REMARKS*****Summary of Amendments Made***

Claim 1 has been amended in response to the interview of 29 May 2003 between the examiner and the applicants' representative which is explained in greater detail in the 102(b) response below. Claims 27-41 have been reinstated for consideration. New claims 27-34 correspond to claims 1-8 and new claims 35-42 correspond to old claims 10-17.

Amendments were made to claims 1-20 (as well as the addition of claims 21-26) in the 26 February 2003 response were made as it appeared that these claims were allowable after consideration by the examiner and his consultation with a primary examiner. The applicants had no intention of abandoning the broader subject matter if a Notice of Allowance was not forthcoming.

In order to expedite prosecution, claims 18-20 have not been reinstated. The applicants reserve the right to pursue this subject matter in a divisional application.

Claims 1-8, 10-17 and 21-42 are now pending. It is believed that no new matter has been added.

Arrangement of the Specification

As indicated in the office action, the arrangement cited is "preferred" and not a requirement. It is presumed that the examiner is aware of the effect(s) of the *Festo* series of decisions; prosecution strategies in light of this decision dictate that that headers not be inserted (a school of thought promulgated by Professor (emeritus) Irving Kayton of George Mason University and Patent Resources Group, Inc.)

35 U.S.C. 102(b) rejection

Claims 1, 3, 4, 6, 16 and 26 were rejected as being anticipated over applicants' admission of prior art (page 1, lines 10-31 and page 2, lines 1-5).

Discussion of limitation on waterproofing membrane

It appears that the examiner acknowledges that at the very least the "applicants' admission" lacks a teaching that the waterproofing membrane is sprayable (or has been applied thereto by spraying). This difference is accounted for by the examiner as being part of "product-by-process" language.

However, even if one were to accept the examiner's interpretation that the claim has a product-by-process element, the rejection does not take into account that the term "sprayable" (or phrase "has been applied thereto by spraying") used in claim 1 also describes a very real limitation on the waterproofing membrane (e.g. sprayable waterproofing membrane would not include a 20' x 20' x 1" sheet of plywood).

The applicants' hold that the term "sprayable" (or phrase "has been applied thereto by spraying") is not product-by-process language as the scope of the "final" product is affected by the "process" step; i.e. the same product would not be obtained by using alternative process steps.

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MBZ-0345Complete detail requirement

MPEP 2131 states that to anticipate a claim, the reference must teach every element of the claim and quotes from *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d, 1913, 1920 (Fed. Cir. 1989) which states "The identical invention must be shown in as complete detail as is contained in the...claim."

In addition it has previously been held that, "An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention." see *In re Spada*, 911 F.2d 705, 708, 15 USPQ 1655, 1657 (Fed. Cir. 1990)

In addition to the sprayable nature of the waterproofing membrane, the applicants' admission fails to meet this standard for anticipation as there is no teaching or direction for the drainage means described in claim 1 and 3; the waterproofing membrane of claims 4 and 26.

35 U.S.C. 103(a) rejection

In order to facilitate a shorter response, the examiner's rejections have been group based on their reliance on "applicants' admission" of prior art.

Primary reference is applicants' admission of prior art

- (1) Claims 1-3, 8, 10, 11, 16, 17 and 23 were rejected as being obvious over applicants' admission of prior art, *supra*, in view of Pulkkinen (U.S. Patent 4,695,188)
- (2) Claims 1, 3-8, 11-17, 23, 25 and 26 were rejected as being obvious over applicants' admission of prior art, *supra*, in view of WO 98/24738.
- (3) Claims 5, 7, 8, 11-15, 17 and 25 were rejected as being obvious over applicants' admission of prior art, *supra*, in view of WO 98/24738. - (Unclear why this was included as a separate rejection rather than being combined with (2)???)

Total claims rejected if rejections were combined: 1-8, 10-17, 23, 25 and 26.

Background

In addition to the statement of the *Graham v. Deere* inquiries, MPEP 2141 also discloses that "When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:

- (A) The claimed invention must be considered as a whole;
- (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
- (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and
- (D) Reasonable expectation of success is the standard with which obviousness is determined.

Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986)."

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MBZ-0345***Consideration of applicants' admission as a whole***

The passages referred to by the examiner as being part of the "applicants' admission" are merely a broad recitation of elements. As acknowledged by the examiner, the applicants' admission is filled with differences between this broad disclosure and the specific elements of the applicants' claimed invention.

Moreover, this applicants' admission is ineligible as prior art does not adequately describe claddings beyond the broad recitation of elements. By way of illustration, if the applicants specification only included the passages recited by the examiner as being part of the applicants' admission, the present claims would properly be rejected as lacking adequate written description as none of the additional elements would have been described (i.e. lack a showing of "possession of the invention").

Although the rejections are based on a combination of references, this lack of description is a fatal defect for the applicants' admission which cannot be solved by the using additional references.

Impermissible hindsight vision accorded to combine the references

Even if the applicants' admission could be considered to be adequately described for the applicants' invention or something close to the applicants' invention, the examiner acknowledges several differences between the applicants' admission and the claimed invention. This includes:

- (1) waterproofing material being sprayed;
- (2) waterproofing material being sprayed plastics material;
- (3) waterproofing material a layer of coalesced particles of thermoplastic polymer;
- (3) layer of concrete being sprayed;
- (4) layer of concrete containing reinforced fibers;
- (5) layer of concrete between the drainage means and the substrate

The secondary references of Pulkkinen and WO 98/24738 are relied up to account for these differences. However, there is no motivation or direction to modify the applicants' admission which comes from either of these references or from the applicants' admission itself, i.e. examiners motivation for combining references finds no support from the references but appears to be based on hindsight reconstruction or "obvious-to-try" rationales.

Even if the examiner views the applicants' claddings as being based on "simple" technology, this still does not preclude providing a motivation to combine the references to arrive at the appellants' claimed invention nor does this lessen the standard for engaging in hindsight reconstruction. It was previously presented in *In re Dembicza*k, 175 F.3d 994, 50 USPQ2d 1614, (Fed. Cir. 1999) that:

"...Measuring a claimed invention against the standard established by section 103 requires the oft-difficult but critical step of casting the mind back to the time of the invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. Close adherence to this methodology is especially important in the case of less technologically complex inventions, where the very ease with which the invention can be understood may prompt one to fall victim to the insidious effect

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of a hindsight syndrome wherein that which only the inventor taught is used against the teacher.'...Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."

As the mere mention of "hindsight reconstruction" often brings a reflexive application of MPEP 2145 X. A., the examiner is reminded that this passage states:

However, "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).

Examiner's reasoning for combining the references comes from the examiner himself with the knowledge gleaned from the applicant's disclosure; there is no direction to modify the applicants' admission from any of the references cited. see also MPEP 2143.01 which states that "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." see also *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430, (Fed. Cir. 1990).

Lastly, there is no indication that either the applicants' admission or the secondary references actually directed one of ordinary skill in the art to make the necessary changes to the applicants' admission necessary to arrive at the applicants' claimed invention. As such, combination of the references also amounts to an "obvious-to-try" rationale which is not permitted.

MPEP 2145 X. B. states:

"The admonition that 'obvious to try' is not the standard under § 103 has been directed mainly at two kinds of error. In some cases, what would have been 'obvious to try' would have been to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful.... In others, what was 'obvious to try' was to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988) (citations omitted)

In the present case, the combination of references merely represents an open invitation to experiment with "vary all parameters or try each of numerous possible choices".

Closing

Therefore, the applicants' hold that the claims are unobvious over the combination of prior art as references when considered as a whole do not suggest the desirability and thus the obviousness of making the combination and because the applicants' claddings can only be arrived by using the benefit of

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impermissible hindsight vision afforded by the claimed invention.

As these points represent two of the four basic tenets of patent law for obviousness, no discussion is made over the "reasonable expectation of success" tenets at this time.

Secondary reference is applicants' admission of prior art

Claims 1-3, 6-8, 10, 11 and 15-17 were rejected as being obvious over Pulkkinen, *supra*, in view of applicants' admission of prior art.

Claims 4, 5, 12-14 and 25 were rejected as being obvious over Pulkkinen, *supra*, in view of applicants' admission of prior art and WO 98/24738.

Total claims rejected if rejections were combined: 1-8, 10-17 and 25.

Review of Pulkkinen reference

(1) Significant differences belies the holding that "Pulkkinen discloses the invention substantially as claimed"

The examiner stated that "Pulkkinen discloses the invention substantially as claimed. However, Pulkkinen lacks a drainage means that is a plastics mesh with at least a partial waterproof layer....lacks a sprayed waterproofing membrane such as a plastics material, a layer of coalesced particles of thermoplastic polymer and wherein the layer of concrete is sprayed reinforcing fiber concrete."

The examiner's latter statements would appear to contradict the examiner's initial premise that Pulkkinen discloses the invention substantially as claimed.

(2) Pulkkinen's teachings limits the possible scope of obviousness at the outset

The examiner wrote that "Pulkkinen discloses a cladding on a partially-overhanging substrate (14) which comprises, in sequence starting from the substrate; a drainage means (15); a waterproofing membrane (12) which has been applied thereto by spraying and a layer of reinforcing (fibre) concrete (11). The substrate is given an initial layer of concrete (13)".

This is not quite correct as (11) is not a layer of concrete but rather a reinforced plastic layer. Pulkkinen states that the interior of this plastic layer can be coated and lists concrete as one of a group of choice of materials. Therefore, even ignoring the other differences between Pulkkinen and the applicants' invention for the time being, it can be seen that the examiner's obviousness rejection is already limited to a scope wherein the applicants invention must possess a reinforced plastic layer between elements (b) and (c) of the claim and that this "baggage" must be carried throughout the establishment of the *prima facie* case of obviousness.

To further illustrate how Pulkkinen differs from the applicants claimed invention, the chart below (see next page) gives a depiction of the teaching from Pulkkinen.

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Pulkinnen Ref. #s	Description
	Interior
	Coating for outer surface (plastic, steel, fibre concrete – col. 3, lines 13-14, see also claim 1)
11	Outer surface (reinforced plastic layer – col. 3, lines 3-4, see also claim 1)
12	Steel-reinforced water-tight sprayed concrete layer – col. 2, lines 5-10
13	Sprayed concrete layer permeable to water with subdrains 15 ("water conductivity") – col. 2, lines 8-14
14	Blasted rock surface – col. 2, lines 5-10
	Exterior

(3) Distinction between inventions adds additional burden to establishing motivation to combine

Further, there is an important distinction between the inventions which colors how and if the invention of Pulkinnen can be modified, i.e. the applicants invention is directed toward claddings the purpose of which is to keep water out. The invention of Pulkinnen is directed toward cisterns and tunnels which are designed to keep water (or other liquids or gasses) in.

While it is not necessary for the motivation to modify the cited reference to be the same as the intended use of the applicants' Invention, the proposed modification cannot render the prior art unsatisfactory for its intended purpose (see MPEP 2143.01).

Applicants' admission provides no teaching or direction to modify Pulkinnen reference - Combination of references does not support obviousness.

The comments with regard to the applicants' admission made above also apply here. Furthermore, there is no direction or guidance provided for the specific elements that Pulkinnen is said to be lacking and even if it could be proven that the applicants' admission was suggestive of a particular element, there is no direction or guidance to modify Pulkinnen in the manner described by the examiner to arrive at the applicants' claimed invention.

Moreover, it is unclear why one of ordinary skill in the art would even look to the applicants' admission in the first place as their products serve two different functions (e.g., keeping water out (applicants' invention) vs. keeping water in (Pulkinnen)) and represents a teaching away from the invention of Pulkinnen. Determination of obviousness requires viewing the applicants invention and the prior art "as a whole" and does not permit the picking and choosing of elements to fit the rejection (e.g. "...Determination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention.' see *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546, 48 USPQ2d 1321, 1329 (Fed. Cir. 1998).

Lastly, there is no indication from any of the references cited why one would be motivated to take the teachings of Pulkinnen which use at least four layers wherein each of the layers are solid materials (concrete, steel and plastic) for "flimsier" material such as a mesh or geotextile as is taught by the applicants especially given that Pulkinnen's cisterns appear to be pressurized (see e.g. col. 2. lines 11-15 and 29-32).

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WO 98/24738 also provides no teaching or direction to modify Pulkkinen reference - Combination of references does not support obviousness

The '738 reference is similar to the applicants' admission in that they are directed toward claddings, however, for this reason the '738 reference also represents a teaching away from Pulkkinen and also lacks the requisite direction to substitute this teaching into Pulkkinen.

No applicants' admission used in rejection

Claim 26 was rejected as being obvious over Pulkkinen, *supra*, in view of WO 98/24738.

Similar to the use of '738 above in combination with Pulkkinen, '738 reference also represents a teaching away from Pulkkinen and also lacks the requisite direction to substitute this teaching into Pulkkinen.

Allowable subject matter

Claims 21, 22 and 24 were objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form.

Closing

Applicants also believe that this application is in condition for allowance. However, should any issue(s) of a minor nature remain, the Examiner is respectfully requested to telephone the undersigned at telephone number (212) 808-0700 so that the issue(s) might be promptly resolved.

In addition, given the unusual number of non-final office actions present in this application, the applicants request that if the claims are not allowed, that the next office action be made final (presuming there are no significant changes in the rejections or prior art used) so that prosecution can continue at the Board of Appeals.

Respectfully submitted,
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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment under 37 CFR § 1.111 (15 pages total) is being facsimile transmitted to the United States Patent and Trademark Office on the date indicated below:

Date: 8 September 2003

By: Agata Glinska
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